Why this topic

What is CPI and how is it calculated

Where is the data from

What did the data show (graphs)

Video rental had an adjusted R^2 value of 0.5714 and cleaning supplies had an adjusted R^2 value of 0.6711, showing the strongest correlation among the different categories while medical supplies, prescription drugs, and nonprescription drugs all showed no correlation with an adjusted R^2 value that was negative of -0.01856, -0.03761, and -0.04332 respectively. As a result of the negative R^2 values, the category of medicine showed no relationship with the covid rates data with a negative adjusted R^2 value while the category of home showed strong correlation with an adjusted R^2 value of 0.6485. While certain consumer goods showed a strong relationship with covid rates, both India and the United States as a whole showed little relation between consumer prices and covid rates with adjusted R^2 values of 0.2351 and 0.3018 respectively.

For the data that had adjusted R^2 values 0f 0.43 or greater all were statistically significant with p values of 0.0223 or smaller.

What analysis was done and why

Conclusion

How improve

What future research ideas comes to mind based on your results

and experience with this analysis?

When continuing the research, it will be important to add the new data that the Bureau of Labor Statistics publishes about CPI data within the United States and the rate of new covid cases in urban areas from the Center for Disease Control. In the future, there may be different categories to investigate to find any relationship between the rate of Covid-19 infections and the price of goods. The focus could shift from private individuals to how business saw their costs change or their stock price changed as covid continued.

One factor that may have led to a stronger correlation between CPI data and covid rates would be to add a lag to the CPI data to account for issues that arose within the supply chain dues to covid rates and would not have immediate effects on the prices of consumer goods. Another would be to see how the average change differs between pre-covid and during covid.

Sources:

U.S. Bureau of Labor Statistics. (n.d.). Archived consumer price index supplemental files. U.S. Bureau of Labor Statistics. Retrieved March 16, 2022, from https://www.bls.gov/cpi/tables/supplemental-files/home.htm

Organization for Economic Co-operation and Development, Consumer Price Index: All Items for India [INDCPIALLMINMEI], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/INDCPIALLMINMEI, April 20, 2022

Centers for Disease Control and Prevention. (n.d.). CDC Covid Data tracker. Centers for Disease Control and Prevention. Retrieved March 17, 2022, from https://covid.cdc.gov/covid-data-tracker/#pop-factors\_7daynewcases